

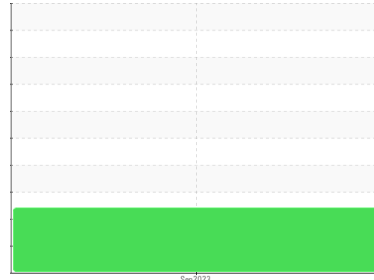


FUEL REPORT

Sample Rating Trend

ISO

Area
[CP29159]
 Machine Id
5000 GAL MAIN TANK
 Component
Diesel Fuel
 Fluid
DIESEL FUEL No. 2 (--- QTS)



DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. ASTM D0482, D5452, and D6079 performed at subcontracted ISO 17025 laboratory. All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

Corrosion

All metal levels are normal indicating no corrosion in the system.

Contaminants

There is a high amount of particulates present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0863783	---	---
Sample Date	Client Info	25 Sep 2023	---	---
Machine Age	hrs Client Info	0	---	---
Sample Status		ATTENTION	---	---

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2
Specific Gravity	*ASTM D1298	0.840	---	---
Fuel Color	text *Visual Screen	Red	---	---
ASTM Color	scalar *ASTM D1500	L4.0	---	---
Visc @ 40°C	cSt ASTM D445 4.1	2.46	---	---
Pensky-Martens Flash Point	°C *PMCC Calculated	56	---	---

SULFUR CONTENT

method	limit/base	current	history1	history2
Sulfur	ppm ASTM D5185m	2	---	---
Sulfur (UVF)	ppm ASTM D5453	10	---	---

DISTILLATION

method	limit/base	current	history1	history2
Initial Boiling Point	°C ASTM D86	157	---	---
5% Distillation Point	°C ASTM D86	187	---	---
10% Distill Point	°C ASTM D86	198	---	---
15% Distillation Point	°C ASTM D86	208	---	---
20% Distill Point	°C ASTM D86	217	---	---
30% Distill Point	°C ASTM D86	232	---	---
40% Distill Point	°C ASTM D86	246	---	---
50% Distill Point	°C ASTM D86	260	---	---
60% Distill Point	°C ASTM D86	274	---	---
70% Distill Point	°C ASTM D86	289	---	---
80% Distill Point	°C ASTM D86	305	---	---
85% Distillation Point	°C ASTM D86	314	---	---
90% Distill Point	°C ASTM D86	325	---	---
95% Distillation Point	°C ASTM D86	341	---	---
Final Boiling Point	°C ASTM D86	351	---	---
Distillation Residue	% ASTM D86	1.4	---	---
Distillation Loss	% ASTM D86	0.7	---	---

IGNITION QUALITY

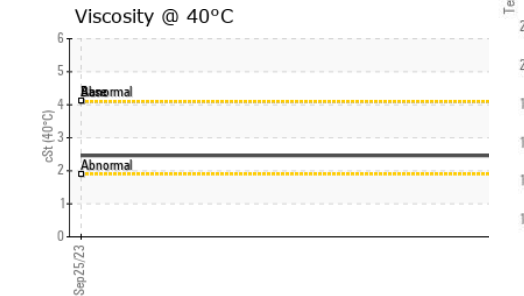
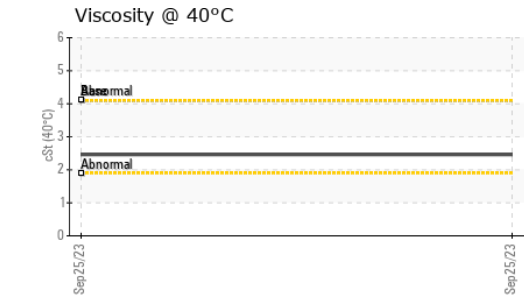
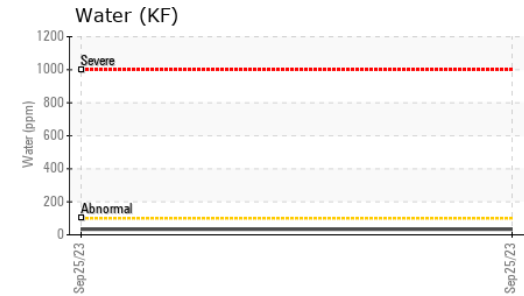
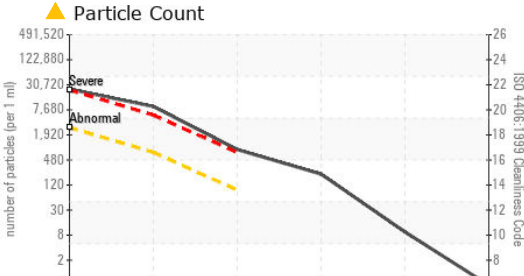
method	limit/base	current	history1	history2
API Gravity	ASTM D7777	37.0	---	---
Cetane Index	ASTM D4737 <40.0	48.1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m <1.0	<1	---	---
Sodium	ppm ASTM D5185m <0.1	0	---	---
Potassium	ppm ASTM D5185m <0.1	0	---	---
Water	% ASTM D6304 <0.05	0.003	---	---
ppm Water	ppm ASTM D6304 <500	33.7	---	---
% Gasoline	% *In-House <0.50	0.0	---	---
% Biodiesel	% *In-House <20.0	0.0	---	---



FUEL REPORT

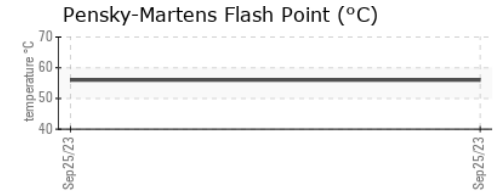
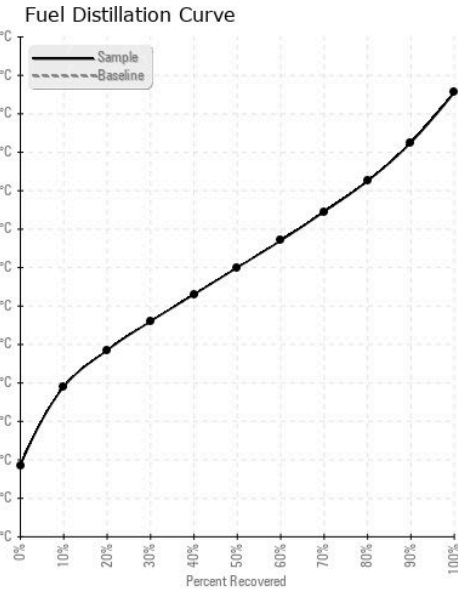


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 20923	---	---
Particles >6µm	ASTM D7647	>640	▲ 8039	---	---
Particles >14µm	ASTM D7647	>80	▲ 751	---	---
Particles >21µm	ASTM D7647	>20	▲ 194	---	---
Particles >38µm	ASTM D7647	>4	▲ 8	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 22/20/17	---	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	<1	---	---
Nickel	ppm	ASTM D5185m <0.1	0	---	---
Lead	ppm	ASTM D5185m <0.1	0	---	---
Vanadium	ppm	ASTM D5185m <0.1	0	---	---
Iron	ppm	ASTM D5185m <0.1	0	---	---
Calcium	ppm	ASTM D5185m <0.1	2	---	---
Magnesium	ppm	ASTM D5185m <0.1	1	---	---
Phosphorus	ppm	ASTM D5185m <0.1	4	---	---
Zinc	ppm	ASTM D5185m <0.1	0	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0863783 **Received** : 02 Oct 2023
Lab Number : 05966771 **Diagnosed** : 26 Oct 2023
Unique Number : 10673322 **Diagnostician** : Doug Bogart
Test Package : DF-2 (Additional Tests: Screen)

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To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)